

## World Agriculture & Trade



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## Imports Rising in Middle East & North Africa

The Middle East and North Africa (MENA) region is a major global market for agricultural and food products. As a region, it is one of the largest producers and importers of food and feed grains in the world—the region includes Egypt, the largest wheat importer in the world, and Turkey, one of the largest wheat producers. The region's share of total world grain imports during 1996-98 is estimated at 22 percent, its share of wheat imports at 25 percent and barley at 41 percent. The region is also a major importer of oil meals and vegetable oils; its share of world oil meal imports is 8 percent and of vegetable oils about 11 percent, both of which continue to grow.

The MENA region—encompassing Algeria, Egypt, Libya, Morocco, Tunisia, Bahrain, Cyprus, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syria, Turkey, United Arab Emirates, and Yemen—is characterized by rapidly growing populations, rising real incomes, and changing diets as consumers reduce their intake of grains and add more livestock products. While the overall population is growing, the region is experiencing declining farm populations and declining land in farms, and increasing

urbanization has reduced the availability of water for agriculture.

The combination of increasing demand for food and decreasing resources for agriculture has overwhelmed the region's capacity to meet its consumption needs. Reduced but still considerable government intervention and rising competition from continuing trade liberalization have added to the difficulties the region's producers face in meeting the demand for more and different foods. As a result, food and agricultural imports have grown from an estimated \$26.7 billion in 1990 to \$34.5 billion in 1997, rising an average 3.6 percent per year.

Imports are led by food and feed grains, oilseeds and products, cotton, tobacco, livestock and livestock products, and dairy and dairy products. On average, food imports represented 15-20 percent of total imports over the past two decades. However, they represent a much higher proportion in the Persian Gulf countries, where some nations are totally dependent on imports to meet their food needs. Kuwait, for example, imports 100 percent of its food, and food imports made up 30 percent of average total imports for Egypt.

Iran, Turkey, and Algeria are also very large importers of agricultural products.

The region is also an exporter of food and feed grains; fruits, nuts and vegetables; cotton; and tobacco. Exports totaled over \$13.1 billion in 1997 and have increased at a rate of about 6 percent per year since the early 1990's. With the exception of some fruits and vegetables, few exports are destined for other countries within the region; most go outside the region, chiefly to the European Union (EU).

### *Population, Income Drive Demand*

Population growth is a primary factor driving increases in demand for food and agricultural products, and although growth rates have declined in recent years, even small percentage increases in a population approaching 400 million have major impacts on demand. Average population growth rate during 1976-97 was 3.3 percent for the region as a whole, compared with under 1 percent in the U.S. More than half the region's population is under 25 years of age, and MENA populations will continue to increase substantially even if more effective efforts are undertaken to restrain population growth.

A second factor driving food demand has been income. From the 1960's through the first half of the 1970's, the region experienced strong and accelerating economic growth as higher oil prices generated higher export revenues and increased investment. Between 1965 and 1980, the region led all other developing regions except East Asia in annual per capita income growth, estimated at over 3 percent. Governments sought to distribute new-found revenues through high price supports for farmers and high food subsidies for consumers, which led to increased demand for cereals and related products and for fruits and vegetables. Rising incomes have increased demand for red meat and poultry, which had previously been low compared with high-income countries like the U.S. To meet increasing demand for meat, governments in the region have supported expanding domestic meat production rather than increasing meat imports, leading to significantly higher require-

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### Total Ag Imports Into the Middle East and North Africa Have Increased Since the Early 1990's . . .

	Average		1996	1997
	1990-92	1993-95		
	\$ billion			
Saudi Arabia	3.99	3.67	4.93	4.91
Turkey	1.87	2.57	4.01	4.09
Egypt	2.72	2.81	3.86	3.44
Algeria	2.38	3.03	2.78	2.76
Iran	2.64	2.66	2.74	2.75
United Arab Emirates	1.77	2.10	2.56	2.29
Israel*	1.25	1.59	2.04	1.99
Morocco	0.93	1.41	1.70	1.43
Libya	1.26	1.16	1.24	1.28
Iraq	1.29	0.95	1.00	1.05
Tunisia	0.57	0.78	0.82	0.91
Jordan	0.73	0.78	0.70	0.78
Other	4.58	6.09	7.09	6.78
Total	25.95	29.59	35.47	34.45

\*Excludes Gaza and the West Bank.

Source: UN Food and Agriculture Organization.

### . . . and U.S. Market Share Has Remained Stable

	Average		1996	1997	1998
	1990-92	1993-95			
	\$ million				
U.S. shipments:					
Egypt	715	994	1319	964	904
Turkey	272	395	637	734	664
Saudi Arabia	540	490	551	668	504
Israel**	328	412	617	537	322
Algeria	478	504	322	315	256
Morocco	149	216	244	167	122
Iraq	110	1	3	82	96
Jordan	140	157	165	142	87
Tunisia	87	115	101	123	81
Other	326	632	540	449	488
Total	3,144	3,918	4,499	4,181	3,525
	Percent				
U.S. share of region's imports	12	13	13	12	--

\*\*Includes Gaza and the West Bank.

-- = Not available

Source: Bureau of the Census, U.S. Department of Commerce.

Economic Research Service, USDA

ments for feed grains and protein meals, supplied largely through rising imports.

Gains in food demand have withstood the financial stresses of a series of sharp oil price declines in the early 1980's. Despite a dramatic collapse in income growth—the oil export revenues of 11 MENA states plummeted from a record \$240 billion in 1980 to around \$110 billion in 1985—the impact on the region's food consumption and food import capacity was marginal.

By the second half of that decade, GDP growth throughout the MENA region barely kept pace with population growth. Non-oil economies like Jordan and Turkey experienced spillover effects as labor demand subsided within the region and in Europe, which was experiencing a recession. Returns from investments made abroad in preceding decades were also declining rapidly as governments drew on those assets to supplement declining revenues. This left many of these economies with growing external indebtedness and financial imbalances.

Imports actually continued to increase, although at a slower pace than during the boom years. Among the region's high-income, oil exporting countries—Saudi Arabia, Libya and Kuwait—agricultural imports were not greatly affected. Because the value of petroleum exports far exceeds the cost of agricultural imports, even during the 1980's, governments were able to maintain or even increase agricultural imports by reducing expenditures in other categories.

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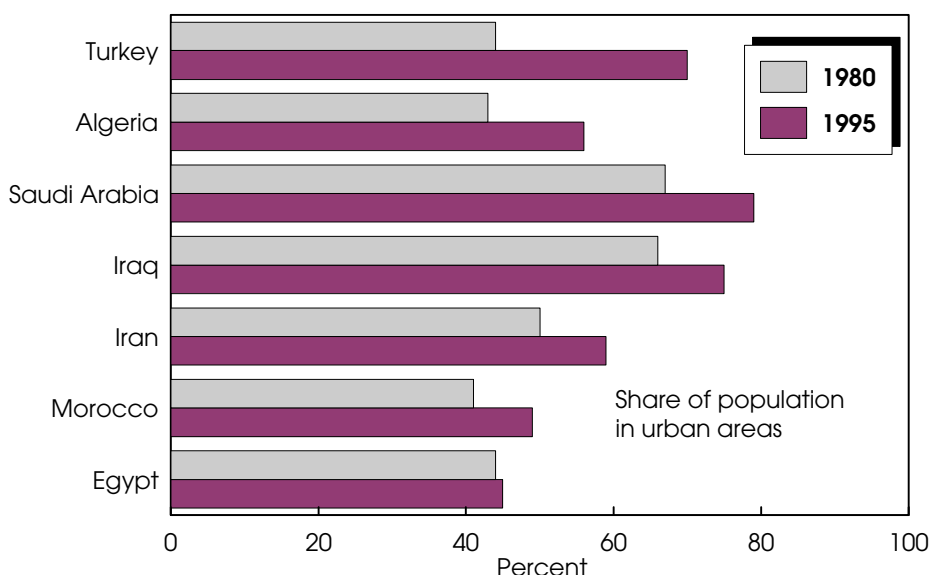
A third factor increasing the region's food demand has been growing urbanization. Urbanization may actually be the most influential determinant of food imports because of its effect on type of diet, food preferences, and standard of living in the region. The attraction of urban life, with better education and health facilities, a more reliable food chain, and often more stable and plentiful employment opportunities, is changing the region's demographics.

Population movements to urban areas have shifted food preferences toward increased consumption of fresh fruits and vegetables, processed cereal products—e.g., pastas, cookies—and certain livestock, dairy, and poultry products. In Turkey, increased consumption of poultry and reduced consumption of mutton and lamb has been a result of rural-to-urban migration. Rural villagers tend to slaughter and consume their own animals—normally sheep. Poultry is processed mostly in slaughterhouses which employ modern marketing and handling techniques to serve the preferences of increasingly health conscious urban dwellers for reduced fat products, as well as for ease of preparation and relatively low prices.

The high price of beef relative to poultry—generally triple—has accelerated growth in poultry's share of meat consumption and led to higher poultry production and imports. In Saudi Arabia, kg per capita consumption of poultry rose from 25 kg in 1980 to 33 kg by 1995 (1 kg = 2.2046 lbs.). At the same time, consumption of beef and veal decreased from 6.4 kg per capita to 3.9 kg because of their relatively high prices.

The rapid expansion of fast-food outlets in Saudi Arabia and other countries has also accelerated growth in consumption of poultry, as have efforts to raise the protein content of local diets at relatively low cost. In Egypt and Turkey, increased poultry consumption comes primarily from a rise in per capita consumption, although still low by western standards. In Israel, however, increased poultry demand is primarily the result of population increases, particularly immigration from Russia.

### Region's Population Shift to Urban Areas Has Been Most Rapid in Turkey



Source: International Monetary Fund.  
Economic Research Service, USDA

### Poor Growing Conditions Constrain Production

The agricultural industry in the MENA region faces a difficult growing environment and consequent variability of production, which hampers the industry's ability to respond to increased demand in the region. A very large proportion of the land, about 70 percent, is unusable for agriculture and presents difficulties for improvement as rangeland, and a large share of arable land has shallow, erodible soils with low organic content. Rainfall is low and erratic and occurs most often during winter, when cold temperatures inhibit growth. Summers are hot, increasing the amount of irrigation necessary for crop growth, but frequent droughts, particularly in North Africa, as well as competition with urban and industrial water demands limit the availability of water for irrigation. The high salt content of much available water further complicates efforts to irrigate.

Finally, farms in the region tend to be small and fragmented. In Turkey, for example, two-thirds of the 4 million farm holdings cultivate less than 5 hectares (1 hectare=2.471 acres) each, often distributed in several noncontiguous parcels. A problem common throughout the region,

such dispersed farming has for decades prevented economies of scale in production, inputs, and marketing, raising the cost of production and keeping agriculture relatively inefficient.

Irrigation, despite its limitations in the region, has been a critical factor in raising productivity. Over the two decades ending in 1995, while total agricultural area increased 12 percent, irrigated area increased an estimated 54 percent—from 15.9 million hectares to 24.5 million hectares. But the extent of irrigation use varies among countries in the region. All agriculture in Egypt is irrigated, as is most in Saudi Arabia, while in Algeria less than 10 percent of agricultural land is irrigated and in Turkey only 15-20 percent. Irrigated land is devoted largely to intensive agriculture, and its increased use parallels a rise in exports since 1975 of higher valued agricultural commodities such as fruits and vegetables.

The potential for substantial additional development of irrigated agriculture in the region is limited. With 7 percent of the world's population, the region has less than 0.5 percent of the world's fresh water resources. Its per capita renewable fresh water resources are only one-tenth the world average, and the agricultural sector

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already accounts for more than 80 percent of total water consumption. As municipal and industrial water demand increases and water availability per capita declines with population growth, the agricultural sector faces growing competition for freshwater resources, particularly given the substantially higher economic returns from municipal and industrial water use and the consequent greater willingness of municipal and industrial sectors to pay for additional water.

Estimates for Israel, Syria, Jordan, the West Bank, and Gaza suggest these areas currently use virtually all replenishable water sources. In dry years, annual use frequently exceeds annual replenishable sources and some uses must be restricted. For example, in 1998/99, consumption for agricultural uses in these areas was cut by 40 percent. In many countries in the region, projections of water requirements predict significant water deficits as early as the year 2000.

### *Implications for U.S. Trade*

What does the MENA region's food demand and supply situation mean for U.S. agricultural exports? The U.S. is a major supplier of agricultural commodities to the region, with shipments averaging \$4.1 billion per year during 1996-98, a 29-percent increase over 1990-92 and 4 percent above the 1993-95 average. Values for 1998 show some decrease, primarily because of lower prices. Grains and oilseeds continue to dominate U.S. sales to the region, as production in the region cannot expand sufficiently to meeting rising demand.

During the same period, strong gains by volume were also made in U.S. shipments of meat and meat products (68 percent), fruits and preparations (81 percent), nuts and preparations (85 percent), vegetable oils (97 percent), soybeans (122 percent), and tobacco (307 percent). Expansion of poultry production in Turkey, Egypt, and Israel accounts for the steep rise in soybean exports. Simultaneously, U.S. sales of protein meals (mainly soybean meal) reached 1.1 million tons in 1998, continuing an upward trend that began in the early 1990's. The rise in meat and meat products and in fruits and nuts is due to the increasing

diversification of diets in the region, as incomes rise and consumers become more health conscious. Increased U.S. tobacco exports to the region are the result of the development of the Turkish cigarette industry.

Changes in technology are also altering the composition of some U.S. exports to the region. For example, U.S. flour exports to the region, mainly to Egypt, averaged over 500,000 tons in the mid-1990's, but are currently below 10,000 tons and unlikely to recover. The expansion of new, modern milling capacity by the private sector in Egypt has made the price of imported flour sufficiently higher than the cost of local flour to make the imported product uncompetitive. That has not been the case in other countries—regional flour imports have remained at 2 million tons in recent years, with Libya, Iraq, Yemen, the UAE the largest importers. However, the EU, because of its substantial restitution payments to exporters, remains the principal supplier.

The opening of a new soybean crushing plant in Egypt likely will reduce the region's imports of U.S. soybean meal, while increasing imports of U.S. soybeans. At full capacity, Egypt may even export some meal in competition with U.S. meal exports to the region. On the other hand, Egypt's demand for corn will rise as its livestock and poultry sector expands with limited resources for expanding feed output. Since Egyptian importers, feed manufacturers, and other users generally prefer U.S. corn, which they consider reliable, the best quality, and consistent in meeting product specifications, U.S. corn exports should capture a large part of this increase.

Until April 1999, the U.S. had in place embargoes and sanctions against Iran and Libya. The U.S. continues to be a party to multilateral sanctions against Iraq. The combined agricultural imports of these three nations have averaged \$1.6 billion annually in the last 10 years. The only U.S. product included so far in the resumption of limited agricultural and food imports by Iraq under the United Nations oil-for-food program has been wheat. However, Iraq is a major importer of agricultural products and was a major market for U.S. grains and oilseeds until

late 1990. In the long-term, Iraq will again be a major importer of agricultural products, and the U.S. will be in a position to supply that market. U.S. sanctions against Libya have precluded U.S. exports to that market, and even with the recent lifting of sanctions, the Libyan market for U.S. exports will be slow to resume.

U.S. agricultural exports to Iran were halted by presidential decree in 1995. In April 1999, the U.S. dropped its embargo of food and medicine, opening a \$3 billion agricultural market to the U.S. Before the 1980 hostage crisis, the U.S. held a large market share, and after the release of hostages, U.S. sales resumed to \$281 million in 1981 and averaged \$112 million during 1993-95. During 1995, the last year before the ban, the U.S. shipped \$136 million worth of corn, rice, sunflower oil, and poultry products to Iran.

In 1999/2000, Iran is expected to import 5.5 million tons of wheat, an 83 percent increase over 1998/99, and 1.1 million tons of corn, up 10 percent. Imports of vegetable oil, oilcakes and meal, and rice are also likely to rise as a result of Iran's worst drought in 30 years. The U.S. has good prospects in the wheat and corn market and in sales of oilcake and meal. The barley market, another area of substantial likely imports, will be difficult for the U.S. to penetrate because of continued extremely low-cost Turkish and EU supplies.

For the region as a whole, U.S. market shares of MENA countries' imports will continue to be determined by price, credit, market size, and political considerations. The region will remain an important market for agricultural products in general, and especially for U.S. grains and oilseeds, particularly wheat, corn and oil meals, as well as for U.S. livestock and livestock products, nuts and preparations, fruits and preparations, and tobacco. On the whole, Egypt will remain a large wheat importer, as will Iran and most of the region. Saudi Arabia is likely to resume wheat imports as lower export earnings and tight budgets force reductions in agricultural subsidies and supports in an uncertain oil price environment. **AO**

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